In the claims

Please replace the originally filed claims with the claims listed below. The claims listed below are marked to show the differences from the originally filed claims.

1. (Currently Amended) A computing machine, comprising:

(a) a collection of computing elements called Effectors,

(b) a machine architecture ~~which~~ that determines how the Effectors behave and determines how information is transmitted from one Effector to another Effector.

2. (Currently Amended) The machine of claim 1 wherein a subset of said Effectors~~,~~ ~~called~~ ~~Input Effectors,~~ are configured to receive ~~their~~ information from ~~one or more selected from the following: an external environment, a distinct~~ ~~Effector machine,~~ a Static program~~, or a Meta program~~.

3.) Cancelled.

4.) Cancelled.

5. (Currently Amended) A system comprising ~~The machine of claim 2 wherein~~ an input interpreter, ~~an~~ the input interpreter ~~is used~~being capable of ~~to help design~~at least partially designing at least ~~one or more selected from the following: said~~the ~~Effector~~ machine of claim 1.~~, said Static program, or said Meta program.~~

6. (Original) The machine of claim 5 wherein in said input interpreter is implemented with an Effector machine.

7. Cancelled.

8. (Currently Amended) A system comprising ~~The~~ the machine of claim 1 and an output interpreter, wherein the interpreter is capable of translating firing activity of a subset of said Effectors~~,~~

~~called Effectors, have their firing activity translated by an output interpreter~~.

9. (Currently Amended) The ~~machine~~ system of claim 8 wherein said output interpreter is implemented with an Effector machine.

10. (Original) The machine of claim 1 wherein said machine is a dynamic machine.

11. (Currently Amended) The machine of claim 10 wherein the machine is capable of running a Meta program that changes, over time, one or more ~~of the following~~ properties associated with one or more of said Effectors ~~and said machine architecture: threshold, refractory period, pulse amplitude, pulse width, or transmission time~~.

12. (Currently Amended) The machine of claim 1 wherein ~~error tolerance is used to design~~ ~~hardware of~~ said machine architecture comprises hardware having a predetermined error tolerance.

13. (Currently Amended) The machine of claim 12 wherein ~~said error tolerance is used to build~~ ~~said~~the hardware ~~with~~ includes transistors configured to ~~operating~~ operate at subthreshold.

14. (Currently Amended) A method comprising designing ~~T~~the machine of claim 1 ~~wherein said machine architecture is~~ ~~designed using~~at least partially by ~~cyclic~~ evolving a graph ~~evolution~~representing the machine.

15. (Currently Amended) The ~~machine~~ method of claim 14 wherein the evolving of the graph includes at least performing a~~modules of Effectors are used~~ ~~to facilitate the~~ a crossover of two Effector machines via interchanging modules of Effectors.

16. (Currently Amended) The ~~machine~~ method of claim 14 wherein said evolving the graph is capable of changing ~~one or more of~~ the following properties ~~change for said machine or for Effectors in said machine~~ ~~during said cyclic graph evolution~~:

a number of modules per machine,

a number of effectors per module,

one or more refractory periods associated with one or more effectors,

one or more thresholds associated with one or more effectors, a number of connections,

one or more amplitudes associated with two or more effectors,

one or more pulse widths associated with two or more effectors, and

one or more conduction times associated with two or more effectors.

17. (Currently Amended) A ~~computing~~ method, comprising:

(a) providing a collection of computing elements called Effectors,

(b) providing a machine architecture ~~which~~ that determines how Effectors behave and determines how information is transmitted from one Effector to another Effector.

18. (Currently Amended) The method of claim 17 wherein a subset of said Effectors, called Input Effectors, are capable of receiveing ~~their~~ information from ~~one or more selected from the following:~~ an external environment~~, a distinct Effector machine, a Static program, or a Meta program~~.

19. Cancelled.

20. Cancelled.

21. (Currently Amended)The method of claim 17~~8~~ further comprising

~~wherein an input interpreter is used~~ ~~to help~~ designing ~~one or more selected from the following: said~~an Effector machine via an input interpreter.~~, said Static program, or said Meta program.~~

22. Cancelled.

23. (Currently Amended) The method of claim 17, further comprising designing ~~wherein~~ said machine architecture ~~is~~ ~~designed using~~by at least ~~cyclic~~ evolving a graph ~~evolution~~ associated with the machine architecture.

24. (Currently Amended) The method of claim 17, further comprising translating at least one firing activity of~~wherein~~ a subset of said Effectors, called Output Effectors~~, have their firing activity translated by an~~ ~~output interpreter~~.

25. (Currently Amended) The method of claim 24 wherein ~~said~~ the translating is performed via an output interpreter that is implemented with an Effector machine.

26. (Currently Amended) The method of claim 17 wherein ~~said~~the ~~method~~ machine architecture and effectors are part of~~is~~ a dynamic machine.

27. (Currently Amended) The method of claim 26, wherein ~~a~~ the dynamic machine is capable of running a Meta program that changes, over time, one or more ~~of the following~~

properties ~~of said Effectors and~~ ~~said machine architecture~~associated with one or more of the Effectors~~: threshold, refractory period, pulse amplitude, pulse width, or transmission time~~.

28. (Currently Amended) The method of claim 17, ~~wherein error tolerance is used to~~further comprising designing ~~hardware of~~ said machine architecture based on an error tolerance.

29. (Currently Amended) The method of claim 28 wherein ~~said error tolerance is used to build~~ ~~said hardware with transistors~~said desiging includes at least configuring transistors to ~~operating~~ operate at subthreshold based on the error tolerance.

30.) Cancelled.

31. (Currently Amended) The method of claim 23~~0~~ ~~wherein~~ further comprising crossing over modules of Effectors~~are used~~ between two Effector machines ~~to facilitate the crossover of two Effector machines~~.

32.) The method of claim 23~~0~~ wherein evolving the graph includes at least changing one or more of the following properties ~~change for said architecture or for~~associated with at least a portion of the machine~~Effectors in said architecture during said cyclic graph evolution~~: a number of modules per machine, a number of effectors per module, a refractory period associated with at least one of the Effectors, a threshold associated with an Effector, a number of connections between the Effectors, an amplitude associated with one or more of the Effectors, pulse width associated with one or more of the Effectors, and conduction time between at least two of the Effectors.

33. Cancelled.

34. (Currently Amended) The method of claim ~~33~~ 17 further comprising designing a least one circuit that is associated with the machine by at least ~~wherein Cyclic~~ evolving a ~~G~~graph ~~Evolution is used~~ ~~to design said~~associated with the circuits.

35. (New) The machine of claim 1 wherein a subset of said Effectors are configured to receive information from an external environment.

36. (New) The machine of claim 1 wherein a subset of said Effectors are configured to receive information from a distinct Effector machine.

37. (New) The machine of claim 1 wherein a subset of said Effectors are configured to receive information from a Meta program.

38. (New) The machine of claim 1 wherein a subset of said Effectors are capable of being configured to receive their information from an external environment;

the subset of said Effectors are capable of being configured to receive information from a distinct Effector machine;

the subset of said Effectors are capable of being configured to receive information from a Static program;

the subset of said Effectors are capable of being configured to receive information from a Meta program; and

the subset of said Effectors are capable of being configured to receive information from any combination of the external environment, distinct Effector machine, Static program, and the Meta program.

39. (New) The method of claim 14, wherein said evolving the graph includes at least changing a number of modules in the machine.

40. (New) The method of claim 14, wherein said evolving the graph includes at least changing a number of effectors per module.

41. (New) The method of claim 14, wherein said evolving the graph includes at least changing one or more refractory periods associated with one or more Effectors.

42. (New) The method of claim 14, wherein said evolving the graph includes at least changing one or more thresholds associated with one or more Effectors.

43. (New) The method of claim 14, wherein said evolving the graph includes at least changing a number of connections between two or more Effectors.

44. (New) The method of claim 14 wherein said evolving the graph includes at least changing one or more amplitudes associated with one or more Effectors.

45. (New) The method of claim 14 wherein said evolving the graph includes at least changing one or more pulse widths associated with the Effectors.

46. (New) The method of claim 14 wherein said evolving the graph includes at least changing one or more conduction times associated with the Effectors.

47. (New) A system comprising an input interpreter, the input interpreter being capable of at least partially designing at least a Static program for the machine of claim 1.

48. (New) A system comprising an input interpreter, the input interpreter being capable of at least partially designing at least a Meta program for the machine of claim 1.

49. (New) The machine of claim 10 wherein the machine is capable of running a Meta program that changes, over time, one or more properties of said machine.

50. (New) The method of claim 17 wherein a subset of said Effectors, called Input Effectors, are capable of receiving information from a distinct Effector machine.

51. (New) The method of claim 17 wherein a subset of said Effectors, called Input Effectors, are capable of receiving information from a Static program.

52. (New) The method of claim 17 wherein a subset of said Effectors, called Input Effectors, are capable of receiving information from a Meta program.

53. (New) The method of claim 17 wherein a subset of said Effectors, called Input Effectors, are capable of receiving information from an external environment;
the Input Effectors are capable of receiving information from a distinct Effector machine;
the Input Effectors are capable of receiving information from a Static program; and
the Input Effectors are capable of receiving information from a Meta program.

54. (New) The method of claim 26 wherein the dynamic machine is capable of running a Meta program that changes, over time, a threshold associated with one or more Effectors.

55. (New) The method of claim 26 wherein the dynamic machine is capable of running a Meta program that changes, over time, a refractory period associated with one or more Effectors.

56. (New) The method of claim 26 wherein the dynamic machine is capable of running a Meta program that changes, over time, a pulse amplitude associated with two or more Effectors.

57. (New) The method of claim 26 wherein the dynamic machine is capable of running a Meta program that changes, over time, a pulse width associated with two or more Effectors.

58. (New) The method of claim 26 wherein the dynamic machine is capable of running a Meta program that changes, over time, a transmission time associated with two or more Effectors.